



Metro

Los Angeles County
Metropolitan Transportation Authority

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Metro Sustainability Program
State of California – Water Efficiency Grant
Division 30 – Bldg 5 – Filtration System Upgrade
Proposal Monitoring
December 11, 2014

Metro's sustainability program requires measurement and verification of all funded projects claiming to save energy or water. Typical procedures related to the monitoring of performance for water and energy projects follow the International Performance for Measurement and Verification Protocol (IPMVP), which provides an overview of current best practice techniques available for verifying results of energy efficiency, water efficiency, and renewable energy projects. There are four defined approaches for monitoring a given project's resource savings based on IPMVP. The details of the project and specificity of performance verification will determine the methodology used for a given project.

The project team will be utilizing IPMVP Option C: Whole Building to measure performance post installation. Option C involves use of utility meters or whole building sub-meters to assess the energy performance of a total building. Option C assesses the impact of any type of ECM, but not individually if more than one is applied to an energy meter. This Option determines the collective savings of all ECMs applied to the part of the facility monitored by the energy meter. Metro installed energy sub-meters isolating Division 30's Building 5 energy use. The water utility bills will be combined with known water sub-meters to provide a whole campus look at energy use. Given the size of the reduction expected to the proposed project we believe that both approaches will capture verifiable savings.

The project team plans to carry out one time measurement and verification 6 months after project completion and will complete a Measurement and Verification Report to document findings.

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